# COMPANY SIZE MODERATES THE EFFECT OF GREEN ACCOUNTING AND COVID-19 ON PROFITABILITY

(Empirical Study on Mining and Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2018-2021 Period)

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#### **Abstract**

This study aims to test and analyze the effect of green accounting and the COVID-19 on profitability moderated by company size in mining and manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2018-2021 period. The type of data used is secondary data in the form of annual reports for each company. The number of samples used in this study amounted to 58 research samples. The results of the study using SPSS version 25 show that: (1) Green accounting has a negative effect on profitability. (2) The COVID-19 has a negative effect on profitability. (3) Company size can weaken the relationship between green accounting and profitability. (4) Company size cannot moderate the relationship between the COVID-19 and profitability.

The implication of the conclusions in this study is that green accounting has a negative effect on profitability. This study proves that the greater the environmental costs, the lower the company's profitability. The COVID-19 has a negative effect on company profitability, proving that the COVID-19 has a negative impact on companies in obtaining profits. Company size can weaken the relationship between green accounting and profitability, proving that the costs sacrificed by companies to carry out environmental performance will have a significant impact on profitability for small companies, in contrast to large companies which have a less significant effect on company profitability. Company size cannot moderate the relationship between the COVID-19 and profitability, proving that neither large nor small companies are able to avoid the adverse effects of the COVID-19.

Keywords: Green Accounting, COVID-19, Profitability, Company Size

#### INTRODUCTION

Along with the development of science and technology, competition between companies is becoming increasingly intense, both on a national and international scale. Each company is required to improve its operational performance in order to maximize its business profits (Romadloni and Pravitasari, 2022). In an effort to improve company performance to increase profitability, some companies take various methods without considering the consequences of the activities carried out, one of which is the excessive use of natural resources to increase the amount of production. This triggers environmental damage which will harm the surrounding community (Meiriani et al., 2022).

According to Laia (2022) reported by bethita.id, in the world Indonesia is ranked 17th and in Southeast Asia it is ranked 1st as the most polluted country with the highest concentration of PM 2.5, namely 34.3  $\mu$ g/m3, the reasonable limit of PM 2.5 according to the World Health Organization (WHO) is PM 2.5 < 25  $\mu$ g/m3. Industrial activity is one of the causes of increased PM 2.5 in Indonesia. Based on the Department of Industry and Trade (DISPERINDAG) nine types of industries in Indonesia, the two most sensitive industries and have the largest contribution of waste are the mining and manufacturing industry sectors, these two sectors have received attention from the government and have become industrial sectors assessed by the Ministry of Environment and Forestry (KLHK) in carrying out their environmental performance (Margaretha and Witedjo, 2014).

According to stakeholder theory, companies must not only fulfill their responsibilities to management and shareholders by maximizing profits, but also fulfill their responsibilities to other stakeholders such as employees, consumers, the environment and the surrounding community (Chasbiandani *et al.*, 2019). According to Risal *et al.* (2020) accounting plays an important role in environmental protection efforts as a link between companies and the environment, this is reflected in the voluntary disclosures made by companies in their financial statements about environmental costs, the accounting system that discusses these environmental costs is called green accounting (environmental accounting).

In response to environmental issues, the Indonesian government has made regulations regarding policies that discuss the environment. These regulations include Law No.23 of 1997 which discusses life management, and Law No.32 of 2009 which discusses environmental protection and management (Murniati and Sovita, 2021). Liana *et al.* (2021) stated that the Indonesian Accounting Association (IAI) association has regulated the concept of environmental accounting in PSAK No. 57 which regulates provisions, and PSAK No. 33 which regulates general mining accounting, as well as PSAK No. 1 which regulates accounting for the environmental impact of corporate activities.

In early 2020, the World Health Organization (WHO) made a statement that the world was hit by the COVID-19. The COVID-19 is the spread of infectious diseases caused by the deadly SAR-Cov-2 virus, the virus was found in Wuhan China at the end of 2019 (Mulianto *et al.*, 2020). According to data from the World Health Organization (WHO) as of April 24, 2020 there are 209 countries that have been attacked by the SAR-Cov-2 virus with a total of 2,626,321 cases with a death toll of 181,938. This has a negative impact not only on the health sector, but on all sectors, especially the very broad social economic sector (Ahmad *et al.*, 2020).

In Indonesia, the COVID-19 case was first declared by the government on March 2, 2020. In an effort to break the chain of spreading the SAR-Cov-2 virus, the Indonesian government has enacted policies such as physical distancing, prohibition of crowding, temporarily stopping direct face-to-face learning, strict direction on the use of masks, prohibition of going home, holding Work From Home (WFH) programs, and conducting lockdowns for some time (Mulianto *et al.*, 2020).

The policies carried out by the government in an effort to break the chain of spreading the SAR-Cov-2 virus have resulted in significant changes to the economic conditions and lifestyle of the community, such as decreased purchasing power due to the lack of intensity of direct community interaction and people tend not to spend their money but save it for urgent needs (Kurniawan and Purnawati, 2022).

As far as the researchers' search for reference sources goes, basically research using COVID-19 has been carried out a lot, but of the many studies conducted it is still rare to make COVID-19 an independent variable, most of the research conducted only compares the period before COVID-19 and at the time of COVID-19. Therefore, it is necessary to further investigate the effect of the COVID-19 variable as an independent variable on company profitability.

Based on research conducted previously, it shows mixed results, both the results of green accounting research on company profitability and the COVID-19 on company profitability. According to Govindarajan (1986) the contingency approach can be a solution to overcome differences in research results. Therefore, the contingency approach raises moderating variables to determine the effect of the relationship between the application of green accounting and the COVID-19 on company profitability. One of the conditional variables used in this study, and based on suggestions from previous researchers (Hadriyani and Dewi, 2022) to add company size variables.

#### LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

#### Stakeholder Theory

Stakeholder theory was proposed by R. Edward Freeman in 1984 which explains that companies have extensive relationships with stakeholders, these relationships can influence the company in achieving its goals. According to Wibawa and Khomsiyah (2022) stakeholder theory explains that in its operational activities, the company cannot stand alone, but cannot be separated from the role of stakeholders. Therefore, in carrying out its business operational activities, the company is required not only to prosper business owners, but also to be able to fulfill its responsibilities towards other stakeholders such as employees, consumers, society and the environment (Chasbiandani *et al.*, 2019).

#### **Profitability**

According to the Indonesian Institute of Accountants (2019), profitability is a measure used to measure the effectiveness of overall company management. According to Kasmir (2008), profitability is a ratio to assess the company's efforts to make a profit, profitability can reflect the company's effectiveness in carrying out its operational activities to generate profits for the company.

#### Green Accounting

According to Ikhsan (2008) green accounting (environmental accounting) is an accounting concept by identifying, measuring, assessing, recording, summarizing, reporting and disclosing information about social and environmental economic activity events. This is in line with the opinion of Lako (2018), which states that green accounting is the process of recognizing, measuring, recording, summarizing, reporting, and disclosing information about the company's economic, social, and environmental activities. According to Rounaghi (2019), green accounting is interpreted as the company's efforts to disclose social costs to improve the company's reputation in carrying out social activities as its responsibility to social and environmental.

## COVID-19

The COVID-19 is a caused by a deadly virus called SAR-Cov-2, this virus was first discovered in Wuhan, China in late 2019 (Mulianto *et al.*, 2020). According to Kurniawan and Purnawati (2022) the SAR-Cov-2 virus has a high and significant rate of spread throughout the world

including Indonesia. Data according to the World Health Organization (WHO) as of April 24, 2020 shows that there have been 209 countries affected by the SAR-Cov-2 virus with a total of 2,626,321 cases and a death toll of 181,938.

In Indonesia, the COVID-19 case was declared on March 2, 2020, in dealing with the COVID-19 case the Indonesian government enacted several policies with the aim of breaking the chain of spreading the SAR-Cov-2 virus, including physical distancing, prohibition of crowding, temporarily stopping face-to-face learning, strict direction on the use of masks, prohibition of going home, holding a Work From Home (WFH) program, and lockdown for some time (Mulianto et al., 2020).

#### Company Size

Company size is a standard measure of the size and size of the company which is reflected in the total assets owned by the company (Khasanah, 2021). Meanwhile, according to Pratiwi and Ardini (2019) states that company size is a comparison of the size of a company, the higher the total assets owned by the company, the greater the company has assets.

## Hypothesis development

## The Effect of Green Accounting Implementation on Company Profitability

According to Wibawa and Khomsiyah (2022) in carrying out its business activities, the company cannot stand alone, it needs support from the role of stakeholders. In accordance with stakeholder theory, companies have a broad relationship with stakeholders who can influence the company in achieving its goals, companies not only fulfill their responsibilities to shareholders, but companies also in running their business must pay attention and provide their responsibilities to other stakeholders such as employees, consumers, society and the environment (Chasbiandani et al., 2019). Tahu (2019) states that one form of corporate responsibility towards stakeholders is to incur costs and perform environmental performance. According to Pflieger et al. (2005) modern industry has begun to care about environmental and social issues because it can affect the company's efforts to increase its profitability.

Research conducted by De Beer and Friend in Chasbiandani *et al.* (2019) states that cases of environmental damage cause companies to care about environmental aspects because they are considered to have an influence on corporate finance. This is in line with the results of research conducted by (Chasbiandani *et al.*, 2019) and Meiriani *et al.*, 2019). (2019) and Meiriani *et al.* (2022) state that the application of green accounting has a positive effect on company profitability.

 $H_1$ : The application of green accounting has a positive effect on company profitability.

## The Effect of COVID-19 on Company Profitability

According to Mulianto *et al.* (2020) in Indonesia, the COVID-19 case was declared on March 2, 2020, in dealing with the COVID-19 case the Indonesian government enacted several policies with the aim of breaking the chain of spreading the SAR-Cov-2 virus, including physical distancing, prohibition of crowding, temporarily stopping face-to-face learning, strict direction on the use of masks, prohibition of going home, holding a Work From Home (WFH) program, and lockdown for some time. This has a negative impact not only on the health sector, but on all sectors, especially the vast economic sector (Ahmad *et al.*, 2020).

According to Kurniawan and Purnawati (2022), the policies carried out by the government in an effort to break the chain of spreading the SAR-Cov-2 virus have resulted in significant changes in economic conditions and people's lifestyles, such as decreased purchasing power, people tend not to spend their money but save it for urgent needs.

On the other hand, the economic crisis due to the COVID-19 has caused panic buying, the demand for basic necessities and health has increased (Mulianto *et al.*, 2020). The panic buying condition that occurs is a public response to uncertainty, as well as a lack of control that will occur in the future. Thus, people will feel safe when they have a large supply of staples to survive (Sim *et al.*, 2020). Research conducted by Mehta *et al.* (2020) states that during the COVID-19, people tend to limit their spending and prioritize the money they have to save and spend on basic needs such as food, drinks, medicines, masks, and household materials. Therefore, changes in consumer behavior are expected to have a significant impact on company profitability.

 $H_2$ : The COVID-19 affects the company's profitability.

## The Effect of Green Accounting Implementation on Company Profitability Moderated by Company Size

A successful company is a company that is able to increase its profitability continuously (Novyanny and Turangan, 2019). Company profitability can be influenced by internal and external factors such as company size and market share (Mulianto *et al.*, 2020). According to Wage *et al.* (2021) company size has an important role in company profits, because the larger the size of the company, the greater the opportunity for the company to increase its operating profit.

According to Kolamban *et al.* (2020) large companies will tend to be more transparent in disclosing information about their operational activities. This is in line with the opinion of Mudjijah *et al.* (2019) explain that a company that has a lot of assets will trigger the company's drive to actively participate in its environment.

 $H_3$ : Company size can moderate the relationship between green accounting implementation and company profitability.

## The Effect of COVID-19 on Company Profitability Moderated by Company Size

The COVID-19 has a negative impact not only on the health sector, but on all sectors, especially the vast social economic sector (Ahmad *et al.*, 2020). According to Pratiwi and Ardini (2019) the size and size of the business is influenced by the total assets owned by the company, the higher the total assets owned by the company, the greater the company has assets.

According to Mudjijah *et al.* (2019) state that large companies will tend to be more secure and have a low probability of experiencing financial difficulties. This is in line with the research of Baros *et al.* (2022) states that companies with a large category have a large risk, but large companies can minimize the risk of bankruptcy because large companies are more likely to be diversified. Conversely, companies in the small category have a low ability to deal with crisis problems. Thus, the conditions of companies with large and small categories have different abilities in dealing with conditions.

## $H_4$ : Company size can moderate the relationship between the COVID-19 and company profitability.

Based on the development of the hypothesis above, the research model is as follows:

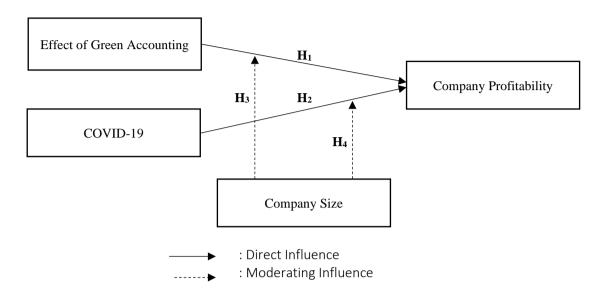


Figure 1. Research Model

#### **RESEARCH METHOD**

This research is a type of causal research with a quantitative approach. The objects of this research are company profitability, green accounting implementation, COVID-19, and company size obtained in the annual report of each company. The population of this study are mining and manufacturing sector companies listed on the Indonesia Stock Exchange for the period 2018-2021. The sample used is purposive sampling with certain criteria (Suliyanto, 2011).

This study uses three types of variables, including: independent variable (Y), independent variable (X), and moderating variable (Z). The following are measurement indicators for each variable:

Table 1. Operational Variables

Variables	Measurements	Scale
Profitability (Y)	$ROA = \frac{\text{Total Asset}}{\text{Net Income}} \times 100\%$	Rasio
Green Accounting (X <sub>1</sub> )	GA = Total Environmental Cost	Rasio
COVID-19 (X <sub>2</sub> )	0 situation before the 1 situation during the	Nominal
Company Size (Z)	UP = Ln (Total Asset)	Rasio

In this study, the data analysis technique used was multiple linear regression analysis using SPSS software version 25. This study tests the data using the classical assumption test which consists of normality, multicollinearity, heteroscedasticity, and autocorrelation tests. Hypothesis testing by doing the (f) test, (t) test and the coefficient of determination test.

#### **RESULTS AND DISCUSSION**

#### Descriptive statistics

Descriptive statistics are carried out to provide an overview of the phenomenon under study. Descriptive statistics describe the minimum value, maximum value, average value (mean), and standard deviation. Based on the data that has been obtained, the results of descriptive statistical analysis are as follows:

Table 2. Descriptive Statistical Analysis

		Descr	riptive Statistics		
	Ν	Minimum	Maximum	Mean	Std. Deviation
Profitability (Y)	58	-0,631	0,282	0,031	0,143
Green Accounting (X <sub>1</sub> )	58	22.670.000	3.399.996.008	643.349.854	844.179.567
COVID-19 (X <sub>2</sub> )	58	0	1	0,48	0,504
Company Size (Z)	58	25,310	30,461	28,58	1,252
Valid N (listwise)	58				

## **Normality Test**

The normality test is carried out with the One Sample Kolmogorov-Smirnov test, if the sig value> 0.05 then the research data is normally distributed, while if sig <0.05 then the research data is not normally distributed.

Tabel 3. Normality Test

(	One-Sample Kolmogorov-S	Smirnov Test
		Unstandardized Residual
N		58
Normal Parameters <sup>a,b</sup>	Mean	0,0000000
	Std. Deviation	0,11033238
Most Extreme Differences	Absolute	0,109
	Positive	0,074
	Negative	-0,109
Test Statistic		0,109
Asymp. Sig. (2-tailed)		0,082°

Based on table 3, the results of the One Sample Kolmogorov-Smirnov test output on this research data have an Asyum value. Sig. (2-tailed) 0.082. Therefore, the data in this study are normally distributed because the sig value is 0.082> 0.05.

#### Multicollinearity Test

Multicollinearity test is done by looking at the Variance Inflation Factor (VIF) and tolerance values. If the VIF value < 10 and the tolerance value > 0.10, there are no multicollinearity symptoms, while if the VIF value > 10 and the tolerance value < 0.10, there are multicollinearity symptoms.

Table 4. Multicollinearity Test Results

Variables	Tolerance	VIF	Description
Green Accounting (X <sub>1</sub> )	1,00	1,00	Multicollinearity free
COVID-19 (X <sub>2</sub> )	1,00	1,00	Multicollinearity free

Based on the test results in table 4, it shows that the variables used in this study have a VIF value of 1.00 < 10 and a tolerance value of 1.00 > 0.10. Therefore, this research data does not occur symptoms of multicollinearity.

#### **Heteroscedasticity Test**

The heteroscedasticity test is carried out to determine whether the regression model has unequal variable variances. The regression model is expected not to experience symptoms of heteroscedasticity by obtaining a sig value. > 0,05.

Table 5. Heteroscedasticity Test

	Correlations				
			Unstandar		
			dized	Green	
			Residual	Accounting	COVID-19
Spearman's	Unstandardized	Correlation	1	0,165	0,175
rho	Residual	Coefficient			
		Sig. (2-tailed)		0,215	0,188
		N	58	58	58

Based on table 5, it shows that the Green Accounting and COVID-19 variables are correlated with their residual values resulting in a sig value. > 0,05. Therefore, in this research regression model there is no heteroscedasticity problem.

#### **Autocorrelation Test**

The autocorrelation test is carried out by looking at the Durbin-Watson (dw) value in the SPSS analysis results. The regression model is expected to have no autocorrelation by having a value of  $d_u < d_w < (4-d_u)$ .

Table 6. Autocorrelation Test

## Model Summaryb

			Adjusted R	Std. Error of	
Model	R	R Square	Square	the Estimate	Durbin-Watson
1	0.635ª	0.403	0.381	0.112321	1.750

Based on table 6, it shows that the autocorrelation test results obtained a Durbin-Watson ( $d_w$ ) value of 1.750. Meanwhile, based on the Durbin-Watson table with n = 58 and k = 2, it can be seen that the value of  $d_u$  = 1.6475, 4-  $d_u$  = 2.3525. Thus, the dw value is between du and 4- $d_u$  (1.6475 < 1.750 < 2.3525) so that the regression model in this study does not occur autocorrelation.

#### Multiple Linear Regression Analysis

Multiple linear regression analysis is performed to determine the effect of two or more independent variables on the independent variable. The independent variables used in this study are Green Accounting and COVID-19 with the independent variable being Profitability. The results of multiple linear regression analysis are presented in the following table:

Table 7. Multiple Linear Regression

Variables	Regression Coefficient	t count	Sig.
Green Accounting (X <sub>1</sub> )	-9,728	-5,520	0,000
COVID-19 (X <sub>2</sub> )	-0,075	-2,554	0,013
Constant	0,130		
Adjusted R Square	0,381		
F count	18,571		
Fsig	0,000		
*sig	< 0,05		

## Moderated Regression Analysis (MRA)

Moderated Regression Analysis (MRA) is conducted to test the presence or absence of the influence of moderating Variables Company Size on the relationship between independent and independent Variables. In this study, the results of the Moderated Regression Analysis (MRA) test are as follows:

Table 8. Moderated Regression Analysis (MRA)

Variables	Regression Coefficient	t count	Sig.
Green Accounting *Company Size (X <sub>1</sub> .Z)	-9,454	-4,718	0,000
COVID-19 *Company Size (X <sub>2</sub> .Z)	-0,017	-0,811	0,421
Constant	-1,167		
Adjusted R Square	0,555		
F count	15,210		
Fsig	0,000		
*sig	< 0,05		

## The Goodness of Fit Test (F Test)

The Goodness of Fit test (F test) is carried out to determine whether the regression model is in accordance with predetermined criteria. The test results are calculated by looking at the significance value, if the sig value < 0.05 then the regression model can be said to be correct.

Table 9. The Goodness of Fit Test

			ANOVA			
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0,469	2	0,234	18,571	0,000 <sup>b</sup>

Residual	0,694	55	0,013
Total	1,162	57	

Based on the results of table 9, the regression equation in this study has a sig value. 0.000 < 0.005, therefore the regression model in this study is said to be appropriate or fit.

## Hypothesis Test (t Test)

The t-test is used to determine the effect of independent Variables on independent Variables partially or individually by using the p-value comparison in the sig column of each independent Variables. This study uses a significance level of 0.05 (one tailed) and / or 0.025 (two tailed). If the Sig value > 0.05 and / or 0.025 then the hypothesis is rejected, there is no influence between the independent Variables on the independent Variables. Meanwhile, if the Sig value < 0.05 and/or 0.025 then the hypothesis is accepted, there is an influence between the independent Variables on the independent Variables. Based on table 7 for direct effects and table 8 for moderating effects, there is some information that can be concluded from the results of hypothesis testing as follows:

## a. First Hypothesis

Based on table 7, Variables Green Accounting has a significance value of 0.000, meaning that the significance value of 0.000 < 0.05 (one tailed) with a coefficient of -9,728. Thus it can be interpreted that Green Accounting Variables negatively affect Profitability, therefore the first hypothesis is **rejected**.

#### b. Second Hypothesis

Based on table 7, Variables COVID-19 has a significance value of 0,013, meaning that the significance value is 0.013 < 0.025 (two tailed). Thus it can be interpreted that Variables COVID-19 affects Profitability, therefore the second hypothesis is **accepted**.

#### c. Thrid Hypothesis

Based on table 8, Green Accounting Variables moderated by Company Size has a significance value of 0.000, meaning that the significance value of 0.000 < 0.025 (two tailed). Thus it can be interpreted that Company Size Variables can moderate the relationship between Green Accounting and Profitability, therefore the third hypothesis is **accepted**.

#### d. Fourth Hypothesis

Based on table 8, Variables COVID-19 moderated by Company Size has a significance value of 0.421, meaning that the significance value of 0.421 > 0.025 (two tailed). Thus it can be interpreted that Company Size Variables cannot moderate the relationship between COVID-19 and Profitability, therefore the fourth hypothesis is **rejected**.

## Determination Coefficient Test (R2)

Based on table 7, the coefficient of determination test results show an Adjusted R Square value of 0.381. Thus, from this value it can be interpreted that the Profitability Variables can be explained by the Green Accounting and COVID-19 Variables by 38.1%. The remaining 61.9% is explained by other variables outside the study.

#### Discussion

## a. The Effect of Green Accounting on Profitability

Based on the tests that have been carried out, the first hypothesis with a significance value of 0.000 < 0.05 with a coefficient value of -9.728 is rejected, because from the test results conducted it can be interpreted that Green Accounting has a negative effect on Profitability. The results of this study are not in line with stakeholder theory, because according to stakeholder theory in running its business the company has a broad relationship with stakeholders, the company cannot stand alone in carrying out its business operations. Therefore, in running its business the company should not only pay attention to capital providers, but must also pay attention to other stakeholders such as employees, society and the environment (Chasbiandani *et al.*, 2019). This is in line with the results of Sulistiawati and Dirgantari's (2016) research, which states that between companies and stakeholders have a mutually influencing relationship.

The results of this study are in line with the doctrine of liberalism figures who oppose the obligation of companies to fulfill social responsibility, including Robert Reich and Milthon Friedman. According to Robert Reich, the costs sacrificed by the company to fulfill social responsibility will only have a bad impact on the company, because these costs will only reduce the profits earned (Shaw, 2009). According to Friedman (1970), the main purpose of establishing a company or organization is to obtain maximum profit. The responsibility of managers as managers of the company is only to maximize profits and prosper the owners of capital. This doctrine is in line with the results of research by Dinniyah and Nuzula (2021), which state that the costs incurred for environmental performance are only considered as expenses that will reduce the amount of profit earned by the company and are considered unable to maximize the profit earned.

This research can also mean that the amount of costs incurred to perform environmental performance does not always have a good impact on the company. Whether or not the company is good at implementing green accounting is not only seen from how much money is allocated to the environment, but how well the company performs its environmental performance, the good and bad environmental performance carried out is reflected in the awards obtained by the company in carrying out its environmental performance. This is in line with the results of research by Iriyani *et al.* (2022) state that the award obtained from the Ministry of Environment and Forestry (KLHK) through PROPER is used as a reference for stakeholders to assess the environmental performance of the company as an effort to carry out its responsibilities to the environment.

## b. The Effect of COVID-19 on Profitability

Based on the tests that have been carried out, the second hypothesis with a significance value of 0.013 < 0.025 with a coefficient value of -0.075 is accepted, because the test results show that the COVID-19 has a negative effect on Profitability. According to Fernandes (2020) the COVID-19 has caused a global economic downturn which can have a negative impact on profitability, but the impact varies by region depending on the severity of the spread of the virus. Giannakis and Papadopoulos (2016) state that the COVID-19 causes companies to experience greater risks in the supply chain such as logistics risk, supply risk and financial risk.

The COVID-19 that occurred in Indonesia starting in 2020 had a devastating impact on the country, especially the economic sector (Ahmad *et al.*, 2020). The efforts made by the

government in order to break the chain of the spread of the SAR-Cov-2 virus caused a significant decline in economic development in Indonesia. This is characterized by a decrease in market demand. The COVID-19 has caused a decrease in market demand in several business sectors, because the crisis due to the COVID-19 is unlike the economic crisis that has occurred before, causing changes in people's lifestyles such as reducing spending on tertiary needs and switching to online buying and selling. This has a negative impact on the company's sales level which results in a decrease in revenue earned.

The lockdown and activity restriction policy is also one of the causes of the decline in profitability. The policy causes production and distribution activities to be disrupted so that many products fail to sell, products that fail to sell incur more operational costs than before such as storage costs and others. In addition, the company also needs to increase the company's operational costs to improve hygiene as a safety measure to protect employees and customers from the spread of the virus. With unstable economic conditions, declining sales levels and increasing operational costs, it is difficult for companies to increase their profitability.

#### c. The Effect of Green Accounting on Profitability Moderated by Company Size

Based on the tests that have been carried out, the third hypothesis with a significance value of 0.000 < 0.025 and a coefficient of -9.454 is accepted, because the test results show that Company Size can weaken the relationship between Green Accounting and Profitability. The results of this study indicate that companies with large categories can more easily incur environmental costs as a form of responsibility for the environment because they have greater resources. In contrast to the condition of small companies, with limited resources, the environmental costs sacrificed by the company have a significant impact on profitability. Therefore, companies categorized as small companies will experience a greater decline in profitability than companies categorized as large companies when the company incurs environmental costs.

## d. The Effect of COVID-19 on Profitability Moderated by Company Size

Based on the tests that have been carried out, the fourth hypothesis with a significance value of 0.421 < 0.025 is rejected, because the results of this test indicate that Company Size cannot moderate the relationship between COVID-19 and Profitability. The COVID-19 occurred in almost all countries in the world and had a devastating impact on all industrial sectors. According to Crucean and Haţegan (2021), some industries have suffered losses due to the impact of the COVID-19. Therefore, there is no guarantee that large companies are more secure in dealing with the COVID-19 because they have diverse business diversification. In reality, the impact of the COVID-19 occurred to various types of companies, both companies categorized as small companies with few assets and companies categorized as large companies with many assets, both of which were still adversely affected by the COVID-19. Thus Company Size cannot be used as a benchmark for companies in facing the crisis due to the COVID-19.

The results of this study are in line with the results of research conducted by Syofyan (2022) which states that during the COVID-19, companies with large categories and small categories were still affected by the COVID-19, due to the fact that many companies with large sizes continued to experience difficulties in obtaining profits to maintain their business business.

#### CONCLUSION

#### Conclusions

Based on the results of the research and discussion above, it can be concluded from this research as follows:

- a. Green Accounting has a negative effect on Profitability
- b. COVID-19 has a negative effect on Profitability
- c. Company Size can weaken the relationship between Green Accounting and Profitability
- d. Company Size cannot moderate the relationship between COVID-19 and Profitability

## **Implications**

Based on the results of the research conducted, the implications of this study are as follows:

- a. The company's activities in fulfilling its responsibility to the environment should not be measured based on the amount of costs incurred to carry out environmental performance, but how much impact the company has in carrying out environmental performance, reflected in the number of company awards in carrying out its environmental performance. Large environmental costs do not guarantee that the company performs good environmental performance. With the many awards obtained by the company in conducting its environmental performance, it will improve the company's image so that investors are confident to increase the capital provided to the company. With large capital, the company can expand and diversify so as to increase profitability.
- b. Companies are adversely affected by the COVID-19, so it is hoped that companies will be more careful in making decisions that affect the sustainability of their business.

#### Limitations

- a. This study only uses a population of mining and manufacturing companies listed on the Indonesia Stock Exchange. It is hoped that further research will expand the population of companies that have a direct relationship with natural resources such as companies that are not public but are registered in PROPER.
- b. Variables Green Accounting in this study is proxied by environmental costs. In reality, many companies do not mention environmental costs and do not specify Corporate Social Responsibility (CSR) costs specifically for the environment, resulting in a limited number of samples used. It is expected for future research to replace Green Accounting proxies with other proxies that better represent the concept of Green Accounting such as using the GRI index, environmental audits, PROPER and others.

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